EM Recovery NEWS FLASH

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Recovery Act Workers Reach Milepost in West Valley

WEST VALLEY, N.Y. – An American Recovery and Reinvestment Act crew recently completed construction of a long trench to curb contaminated groundwater at the West Valley Demonstration Project.

Although the project accounts for a little more than 10 percent of the $63 million the Recovery Act allocated to the West Valley site, it's an important precursor to extensive decommissioning plans that include removal of the groundwater contamination source and demolition of major facilities set to begin next year.

The trench is designed to contain a groundwater plume contaminated with radioactive Strontium-90, which originated from a commercial nuclear fuel reprocessing leak in the 1970s. As groundwater passes through the new 850-foot trench, known as a permeable treatment wall, zeolite material inside will capture the contaminant, leaving the groundwater safe from contamination.

The powerful, 200,000-pound trencher arrived at West Valley Demonstration Project in parts that filled seven trucks. The trencher excavated soil and replaced it with zeolite, a naturally occurring mineral formed from volcanic ash that strips contamination from the groundwater.

"This is a major milestone for the West Valley Demonstration Project. The effective use of Recovery Act funding allowed the installation of the treatment wall. This project not only prevents contaminated groundwater from leaving the site, but it also provides a boost to the local economy and gets us one step closer to site decommissioning," said DOE Federal Project Director Mark Bellis.

Excavated soil was placed in a reinforced containment unit located parallel to the trench.

The Recovery Act accomplishment came after workers used a 200,000-pound trencher to replace soil as far as 30 feet below the surface with 2,400 metric tons of the zeolite, a naturally occurring mineral formed from volcanic ash mined in Idaho. Workers then cleaned the trencher's 30-foot-long cutting boom in a specially constructed containment tent before disassembling the trencher. Workers graded and seeded the areas around the trench.

Mitigating contamination with the trench operation is estimated to cost significantly less over time than use of a traditional pump-and-treat system. The installation and operational costs for the trench, which will be in operation for at least 20 years, is approximately $7 million. The West Valley site estimates the pump-and-treat system would cost more than $60 million during a 20-year period.

Technicians at West Valley are on track to finish installing more than 60 groundwater monitoring wells inside the trench before the end of the year. The performance of the trench operation will be monitored throughout the next two decades.